

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***PERMIT STATEMENT OF BASIS***

Title V (draft/proposed) No. V-99-012  
Free-Flow Packaging International, Incorporated  
500 Krustez Way  
Hopkinsville, Kentucky 42240

March 15, 1999  
Sreenivas Kesaraju, Reviewer  
Plant I.D. #072-0700-0099  
Application Log#: G041

**SOURCE DESCRIPTION:**

Free-Flow Packaging International, Incorporated produces foamed polyethylene sheets for packaging. Polyethylene along with isobutane, ethane, glycerol monostearate are used as the raw materials and are injected into the extruder. The extruded foamed polyethylene sheets go through the slit tube and winder. The wound foamed polyethylene sheets are stored in the warehouse. The bad sheets (Approximately 8%) are reprocessed to get polyethylene resin. The major emissions from this process are the VOC's (Isobutane emissions). There also are isobutane and ethane tanks. The isobutane tanks are pressurized tanks. The ethane tanks are tube trailers and are not filled on site. They are replaced as needed.

**COMMENTS:**

Emission Point 01:

The emissions from extrusion process are Isobutane, which is used as a blowing agent along with ethane. Isobutane is a VOC and not a HAP. The company has a similar plant in Fulton County, Georgia where they have done testing for isobutane emissions at the extrusion process. The emissions are 0.51 lb/lb of isobutane used. However, the permit requires the company to do the testing at this source within 6 months of startup of the process. There are no applicable regulations for this affected facility.

Emission Point 02:

The emissions from Foam Reprocessing are Isobutane. The emissions are assumed to be 100% of the residual isobutane existing in reprocessed material. There are no applicable regulations for this affected facility.

Emission Point 03:

The emissions from Foam Warehouse storage are Isobutane. The residual isobutane existing in the final product escapes during the storage process. Testing at their Fulton County, Georgia facility shows the emissions are 0.1 lb/lb of residual Isobutane in the final product. However, the permit requires the company to do the testing at this source within 6 months of startup of the process. There are no applicable regulations for this affected facility.

**EMISSION AND OPERATING CAPS DESCRIPTION:**

Free-Flow Packaging International, Incorporated is a new facility. This construction is permitted so as to limit the emissions of VOC's to 245 TPY and thus preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration. The emissions of VOC's from all the affected units are directly related to the quantity of Isobutane used. The permit requires monthly monitoring and record keeping of Isobutane usage. The permit also requires the monthly and annual VOC calculations.

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.